

We Claim:

1. A method for targeting shoppers participating in online shopping with at least one merchant comprising the steps of:
 - 5 collecting data regarding the choices of individual shoppers when shopping individually;
 - collecting data regarding the choices of individual shoppers when participating in group shopping;
 - determining a shopper-group interaction measure from said individual shopper data and said group shopper data;
 - 10 determining targeted information on the basis of said shopper-group interaction measure; and
 - sending said targeted information to one or more targeted shoppers.
- 15 2. The method of claim 1, wherein said shopper-group interaction measure is determined on the basis of one or more of:
 - (a) a shopper affinity index,
 - (b) a leadership index,
 - (c) a conformity index, and
 - 20 (d) an assertiveness index.
3. The method of claim 2, wherein said shopper affinity index is determined from the number of times a shopper has voted with other members of a group of shoppers.
- 25 4. The method of claim 2, wherein said shopper affinity index is determined from the number of times a shopper's proposal has been voted for by other members of a group of shoppers.

5. The method of claim 2, wherein said shopper affinity index is determined from the number of times a shopper has been invited by, or issued an invitation to other members of a group of shoppers.

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6. The method of claim 2, wherein said shopper affinity index is determined from the number of shopping groups that a shopper is a commonly member of with other shoppers.

10 7. The method of claim 2, wherein said leadership index is determined from the records of a shopper's purchaser recommendations and the number of times other shoppers in a group of shoppers have followed such a recommendation.

15 8. The method of claim 2, wherein said conformity index is determined from a shopper's voting record regarding purchase proposals with reference to agreeing with a majority or lead shopper's vote within a group of shoppers.

9. The method of claim 2, wherein said assertiveness index is determined from a shopper's voting record regarding purchase proposal with reference to disagreeing with a 20 majority of lead shopper's vote within a group of shoppers.

10. The method of claim 2, wherein said indices are a function of a shopper parameter specified by a said merchant.

25 11. The method of claim 1, wherein said targeted information is determined on the basis of one or both of:

- (a) a rule specified by a said merchant, and
- (b) an adaptive algorithmic rule.

12. The method of claim 11, wherein said merchant rule and said adaptive rule
5 further determine which are to be said targeted shoppers.

13. The method of claim 11, wherein said merchant rule is based on a particular
promotion of goods or services by a said merchant.

10 14. The method of claim 11, wherein said adaptive rule learns from one or more of:

- (a) a shopper affinity index,
- (b) a leadership index,
- (c) a conformity index, and
- (d) an assertiveness index,

15 and wherein said indices are determined from said shopper-group interaction
measure.

16. The method of claim 14, wherein said adaptive rule further learns from said
group shopping measure to decide whether to target information to a group or to
20 individual shoppers.

16. A method for targeting shoppers participating in online shopping with at least
one merchant comprising the steps of:

collecting data regarding the choices of individual shoppers when shopping individually;

determining an individual shopping behavior measure from said individual shopper data;

5 collecting data regarding the choices of individual shoppers when participating in group shopping;

determining a group shopping behavior measure from said group choice data;

determining a shopper-group interaction measure from said individual shopper data and said group shopper data;

10 determining targeted information on the basis of said individual shopping behavior measure, said group shopping behavior measure, and said shopper-group interaction measure; and

sending said targeted information to one or more targeted shoppers.

15 17. The method of claim 16, wherein said targeted information is determined on the basis of one or both of:

(a) a rule specified by a said merchant, and

(b) an adaptive algorithmic rule.

20 18. The method of claim 17, wherein said merchant rule and said adaptive rule further determine which are to be said targeted shoppers.

19. The method of claim 17, wherein said merchant rule is based on a particular promotion of goods or services by a said merchant.

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20. The method of claim 17, wherein said adaptive rule learns from one or more of:

(a) a shopper affinity index,

- (b) a leadership index,
- (c) a conformity index, and
- (d) an assertiveness index,

and wherein said indices are determined from said shopper-group interaction
5 measure.

21. The method of claim 17, wherein said adaptive rule further learns from said group shopping measure to decide whether to target information to a group or to individual shoppers.

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22. The method of claim 21, wherein said group shopping measure is determined on the basis of one or more of:

- (a) a group compatibility and agreement index,
- (b) a maturity index,
- (c) a group youthfulness index, and
- (d) a group harmony index.

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23. The method of claim 22, wherein said group compatibility and agreement index is calculated on the basis of a time series of group shopping history and said individual shopping behavior measure to give an indication of either assimilation leading to targeting information to the group, or lack of assimilation leading to targeting information to individual shoppers.

24. The method of claim 23, wherein said individual shopping behavior measure includes one or more of information on demographics, income, purchase history, navigation history, and preferences.

5 25. The method of claim 17, wherein said adaptive rule further learns from a shopping context measure derived from said individual shopper data.

10 26. An online shopping system comprising:
a plurality of shopper terminals;
at least one merchant site; and
a shopping server system connected to said shopper terminals and said merchant sites by a communications link, and wherein said server system includes:

15 an input/output interface;
a memory that collects and stores data via said interface regarding the choices of individual shoppers when shopping individually, and data regarding the choices of individual shoppers when participating in group shopping;
20 a processor that determines a shopper-group interaction measure from said individual shopper data and said group shopper data, and determines targeting information on the basis of said shopper group interaction measure;
and wherein said interface sends said targeted information to one or more targeted shoppers.

25 27. An online shopping server for interacting with a plurality of shoppers and at least one merchant, comprising:

an input/output interface;

a memory that collects and stores data via said interface regarding the choices of individual shoppers when shopping individually, and data regarding the choices of individual shoppers when participating in group shopping;

5 a processor that determines a shopper-group interaction measure from said individual shopper data and said group shopper data, and determines targeting information on the basis of said shopper group interaction measure;

and wherein said interface sends said targeted information to one or more targeted shoppers.

10 28. The server of claim 27, wherein said processor determines said shopper-group interaction measure on the basis of one or more of:

- (a) a shopper affinity index,
- (b) a leadership index,
- (c) a conformity index, and
- 15 (d) an assertiveness index.

29. The server of claim 28, wherein said processor determines said shopper affinity index from the number of times a shopper has voted with other members of a group of shoppers.

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30. The server of claim 28, wherein said processor determines shopper affinity index from the number of times a shopper's proposal has been voted for by other members of a group of shoppers.

31. The server of claim 28, wherein said processor determines said shopper affinity index from the number of times a shopper has been invited by, or issued an invitation to other members of a group of shoppers.

5 32. The server of claim 28, wherein said processor determines said shopper affinity index from the number of shopping groups that a shopper is a commonly member of with other shoppers.

10 33. The server of claim 28, wherein said processor determines said leadership index from the records of a shopper's purchaser recommendations and the number of times other shoppers in a group of shoppers have followed such a recommendation.

15 34. The server of claim 28, wherein said processor determines said conformity index from a shopper's voting record regarding purchase proposals with reference to agreeing with a majority or lead shopper's vote within a group of shoppers.

35. The server of claim 28, wherein said processor determines said assertiveness index from a shopper's voting record regarding purchase proposal with reference to disagreeing with a majority of lead shopper's vote within a group of shoppers.

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36. The server of claim 28, wherein said indices are determined by said processor as a function of a shopper parameter specified by a said merchant input via said interface.

25 37. The server of claim 27, wherein said processor determines said targeted information on the basis of one or both of:

(a) a rule specified by a said merchant input via said interface, and

(b) an adaptive algorithmic rule stored in said memory.

38. The server of claim 35, wherein said processor determines which are to be said targeted shoppers based on said merchant rule and said adaptive rule.

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39. The server of claim 35, wherein said merchant rule is based on a particular promotion of goods or services by a said merchant.

40. The server of claim 37, wherein said adaptive rule learns from one or more of:

- 10 (a) a shopper affinity index,
- (b) a leadership index,
- (c) a conformity index, and
- (d) an assertiveness index,

and wherein said indices are determined by said processor from said shopper-
15 group interaction measure.

41. The server of claim 38, wherein said processor applying said adaptive rule further learns from said group shopping measure to decide whether to target information to a group or to individual shoppers.

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42. A computer program product for targeting shoppers participating in online shopping with at least one merchant comprising:

 code means for collecting data regarding the choices of individual shoppers when shopping individually;

code means for collecting data regarding the choices of individual shoppers when participating in group shopping;

code means for determining a shopper-group interaction measure from said individual shopper data and said group shopper data;

5 code means for determining targeted information on the basis of said shopper-group interaction measure; and

code means for sending said targeted information to one or more targeted shoppers.